

Elephants may be able to hear rain generated sound up to 150 miles away

October 15 2014, by Bob Yirka



African Bush Elephant in Mikumi National Park, Tanzania. Taken by Oliver Wright, via Wikipedia.

A team of researchers working in Namibia has found that elephants are able to detect rain storms from distances as far away as 150 miles. In their paper published in the journal *PLOS ONE*, the researchers describe how they tracked both elephants and rain over the course of several years and found the elephants were clearly able to detect rain events from great distances and move towards them.

Namibia, like much of south-western Africa, is a hot and dry place for most of the year, that's why animals that live there have learned to take advantage of the rainy season that occurs each year from January to March. Elephants are one such animal—they drink and splash around in temporarily engorged streams and other watering holes. Elephants are

also migratory animals, with herds nearly constantly on the move in the search for food and water. In this new effort the team of researchers was looking to better understand why elephant herds have such strange migration patterns during the [rainy season](#). Prior research has found that a herd will sometimes change direction suddenly with no apparent reason. To find out why, they placed GPS tracking devices on 14 elephants, each a member of a different herd moving around in a different part of the area, over the period 2002 to 2009. They also tracked rainfall using weather satellite data. By analyzing the data from both sources the team was able to see that the sudden changes in migrating direction were due to attempts by the animals to move in the direction of the falling [rain](#). What was so surprising was how the elephants were able to move towards storms that were still very far away, sometimes as far away as a 150 miles.

The researchers can't say for sure how it is that the elephants are able to detect the rainfall, but suspect that they might be able to hear it—either the thunder claps or the rain actually hitting the ground. Prior research has shown that elephants not only can hear very low frequency sounds (which can carry for very long distances) but appear to use them as a means of communication between herd members. More research will have to be done to determine if the low-frequency sounds caused by the storms are the true source of the [elephants'](#) skill or if they have some other means of detection.

More information: *PLOS ONE* October 09, 2014. [DOI: 10.1371/journal.pone.0108736](#)

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